## STATEMENT OF COMMISSIONER BRENDAN CARR

Re: Use of Spectrum Bands Above 24 GHz For Mobile Radio Services, GN Docket No. 14-177

Millimeter wave spectrum can give our country a boost towards winning the race to 5G. Particularly when it's allocated in wide channels, this spectrum is well-suited to the high throughput and low latency that are the hallmarks of next-gen networks. Taken together, two of the millimeter wave bands that are the focus of this item offer 2,400 MHz of spectrum. In one (the 37 GHz band), there is no commercial wireless, and in the other (the 39 GHz band) the Commission has about one third of the spectrum sitting unused in our inventory.

So, what's holding us up? The short answer is that the 39 GHz band is messy. It's fragmented in terms of geography and frequency. And that's due to its history. In the 1990s, companies sought licenses in the band for what was known as wireless local loop service. The wireless companies defined their own license geographies using Rectangular Service Areas, or RSAs.

By the late 1990s, the wireless local loop business wasn't panning out, and so the Commission announced an auction to encourage more intensive use of the band. But this only added more complications. To start, the FCC auctioned 50 MHz pairs of non-contiguous spectrum. It then licensed this spectrum over large Economic Areas, or EAs, on the condition that winning bidders would protect the existing RSA licenses that were nested inside the EAs. And so it remains today, with 50 MHz pairs scattered across the band and a Swiss cheese map of overlapping geographies—including more than 700 licenses that are partially encumbered.

Through this Notice, we take steps to clean up the mess to reflect changes in technology. We propose to do so by clearing and auctioning the spectrum, modeled on our broadcast incentive auction. We start by giving incumbents vouchers equal in value to their existing licenses. If bidding drives up the price of spectrum, incumbents can take the opportunity to sell. Incumbents that choose not to sell will be guaranteed contiguous spectrum in the band. This process will maximize the number of 100 MHz channels in the band, return revenue to the Treasury, and help the United States win the race to 5G.

I want to thank the Wireless Bureau for its work on the Notice. It has my support.